

Robinson, Valois

Subject: Dewey-Burdock Meeting
Location: EPA Conference Center Bighorn Room 2nd floor - Conference Call #: (866) 299-9141
Passcode: Ex. 6 Personal Privacy (PP)
Start: Fri 4/14/2017 9:00 AM
End: Fri 4/14/2017 12:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Organizer: Shea, Valois
Required Attendees: Minter, Douglas (Minter.Douglas@epa.gov); jmays@powertechuranium.com
Resources: R8DEN-2116-Bighorn/R8-Wynkoop

Conference Call #: (866) 299-9141 Passcode: Ex. 6 Personal Privacy (PP)

Call with Powertech April 18, 2017

Answered Powertech's questions about the draft Class III Area Permit requirements.

Robinson, Valois

Subject: Dewey-Burdock Meeting
Location: Conference Call #: (866) 299-9141 Passcode: Ex. 6 Personal Privacy (PP)
Start: Fri 4/21/2017 9:00 AM
End: Fri 4/21/2017 12:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Organizer: Shea, Valois
Required Attendees: Minter, Douglas (Minter.Douglas@epa.gov); jmays@powertechuranium.com

Please forward to the invite to everyone who needs to attend.

Call with Powertech April 21, 2017

Answered additional questions from Powertech's about the draft Class III Area Permit requirements and answered questions about the draft Class V Area Permit requirements.

Robinson, Valois

Subject: Update on UIC Permitting
Location: Darcy's Office

Start: Fri 8/4/2017 9:00 AM
End: Fri 8/4/2017 9:30 AM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Minter, Douglas

Required Attendees: John Mays; Blake Steele; O'Connor, Darcy; Shea, Valois

Greetings John and Blake: please call 866 299 3188 and enter Ex. 6 Personal Privacy (PP) at the prompt.

Douglas

RECORD OF COMMUNICATION

August 8, 2017

Call with Powertech to discuss next steps with the draft permits.

John Mays, Powertech COO

Lisa Scheinost, Powertech

Darcy O'Connor, EPA

Douglas Minter, EPA

Valois Shea, EPA

Summary of Call:

The EPA is currently working with Cadmus, an EPA contractor, to compile all the public comments into two documents so the EPA can post them on the Region 8 UIC Program website and have them available to the public for review. One document will contain comments from public entities; the second will be comments from private individuals. The comments will also include testimony provided during the public hearings.

Cadmus will organize the comments into different topics to make it more efficient for the EPA to address the comments. Cadmus is also reviewing the 7,000+ emails sent to the EPA to identify where the sender added additional comments to the template email text to make sure we do not miss any comments.

The EPA is focusing review on comments received from Tribes in preparation of consultation meetings that we hope to schedule soon.

There are over 1,000 pages of public comments, plus additional documents the public submitted for review, so it is taking a while to review them. We don't have a date for when we expect the review to be completed.

We will let Powertech know when the comments are posted on the EPA website. We plan to send an email out to everyone who signed up on the contact list at the public hearings and everyone who emailed comments announcing that the comments are available for public review.

Robinson, Valois

Subject: Dewey-Burdock conference call
Location: call in number & web link included

Start: Tue 1/30/2018 9:00 AM
End: Tue 1/30/2018 10:30 AM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Shea, Valois
Required Attendees: John Mays; Minter, Douglas

Please use this web link so we can share computer screens during our conference call:
<http://epawebconferencing.acms.com/r56geovq60z/>

The call in number is:
Conference phone number: +1 (202) 991-0477
Conference ID: Ex. 6 Personal Privacy (PP)

Notes on Dewey-Burdock Call Tuesday Jan 30, 2018

2015 PEA per national instrument 43101

Permit modification not necessarily envisioned at this time addressing any changes in Dewey area

Burdock wellfields 8 & 9 in PEA, not prepared to modify permit app at this time.

AE boundary not OK anymore horizontally, added more to add flexibility to expand as a result of delineation drilling. Former wellfield 10 that was Upper Fall River is now Upper Chilson.

Recall Region 6 Burk Hollow project AE process, and AE boundary flexibility.

Preference outline AE boundary provide more area to allow flexibility to expand wellfield based on delineation drilling.

Compare updated AE boundary to new wellfield locations.

Dewey changes still not verified by drilling, so may not come to fruition.

8,000 gpm in SEIS and SER and all other permit applications. Still want to stay with 8,000 gpm.

List of regional wellfield models, Petrotek regional model and small wellfield scale model of flare zone. Look for it in NRC documents If I can't find it I will ask John.

Well 16 in the future. Additional info in the response. Goes through a number of points as to why it can't be used as a drinking water well. Will the well be used for monitoring? Will the drinking water source be replaced by Madison groundwater.

Step rate tests – for injection pressure –

Bounding analysis – equivalent not an accurate – pressure loss while flowing through pipe from header house to wellfield as long as it is not downhill. They will know the elevation change and can calculate the pressure loss. Infusion of gasses doesn't make an change in pressure because the gasses are dissolved. Run at different flow rates, high and low, they will know if they will exceed the pressure. Highly turbulent flow, so that will cause a pressure loss from that. Run all the well in the header house below frac pressure, there is also a safety factor in the permit. Look at higher rates and lower rates and monitoring the wellhead pressure at the same time. If one well does exceed (e.g. downhill well), the manifold would be adjusted so the manifold pressure would be adjusted to be below that injection pressure for that well with the lowest frac pressure. It is also easily calculatable, so a demonstration shouldn't be necessary, but they will demonstrate it with high and low flow rates while measuring pressures at the well.

The well screen is hung, K packers fit snugly against the well casing. The screen is assembled and you push it down the hole. The J tool releases from the drilling tube and you pump the gravel surrounding the outside of the well screen. The tubing is free hanging allows the tubing to go below the water surface to let the water pressure further dissolve the O₂. There is a one way vent at the top of the well to allow the undissolved O₂ to off gas. J tool is a connecting point for the drill steel. K packers do seal so

the gravel packed sand cannot flow upward past. Wells run on sort of a vacuum because the injectate is free falling.

Trend wells – internal control for areas where you want to be extra proactive, e.g. extra thin injection zones – space between overlying and underlying confining zone narrowed, velocity increases. Keeps an eye on the flare coming out from the wellfield. If flare expanded, you would know early on. Not very common, not regulatory, so not compliance wells. Areas where the horizontal travel can be faster, where sands are thinner – e.g. SR 20 ft ss. DB sandstones are thick and consistent, so that is not expected. Always completed in the injection zone. An extra tool where you want to look. Mostly for lateral flow.

Measureable drawdown in pump test monitoring wells; 2 ways vented transducers which automatically correct for barometric changes, vented at top. 2nd way track barometric pressure locally during pump test so it can be subtracted from measurable, Vented is more accurate. Will be compensated for. Drawdown will be obviously a result of well pumping. When you turn the well on you will see a pulse, pressure wave in the observation wells. Speed of sounds is pretty instantaneous. Measureable response. Subject to review, also, during review of wellfield package.

John has more to say: last discussion early December met with RA & Darcy a schedule was discussed for completing this process. They would like this schedule. Anticipated receiving it the middle of January. It was promised during the discussion. They committed to providing a time frame for completion of the draft permit.

USF&W service letter stated there is no take permit is required for the bald eagle it is not required if you start at Burdock. Get a copy of that letter.

John suggests a call to pose the list of questions/discussions and a follow-up call for John to provide the explanations. Be more descriptive on the questions, topics.

Friday, Feb 16 call with John to go over the list of topics.

Next meeting, Friday, Feb 23 9:00 Or Monday, Jan 26,

Robinson, Valois

Subject: Dewey-Burdock Discussions
Location: R8DEN-6108-Grizzly/R8-Wynkoop; Conference phone number: +1 (202) 991-0477;
Conference ID: 2731564

Start: Fri 2/23/2018 9:00 AM
End: Fri 2/23/2018 10:30 AM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Shea, Valois
Required Attendees: Shea, Valois; John Mays; Minter, Douglas
Optional Attendees: Lisa Scheinost; Blake Steele
Resources: R8DEN-6108-Grizzly/R8-Wynkoop

Please call in on Conference phone number: +1 (202) 991-0477; Conference ID: Ex. 6 Personal Privacy (PP)

Here is a web conference link in case we need it:

<http://epawebconferencing.acms.com/r56geovq60z/>

The list of topics for discussion:

1. The pressure step rate test procedures and location for determining the fracture gradient of the Inyan Kara.
2. The option of drilling into the Deadwood under the Class V permit.
3. The EPA process for the new AE boundary.
4. The Dec 15, 2015, USF&WS letter regarding the need for an eagle "take" permit
5. The draft Avian Monitoring Plan
6. Opportunity for Azarga to discuss or expand on any of the Class III permit comments.

RECORD OF COMMUNICATION

February 23, 2018

Summary of Meeting (conference call) focused on Powertech's (PT) Comments on EPA's proposed aquifer exemption.

Lisa Scheinost, Powertech Licensing and Compliance Engineer

John Mays, Powertech COO

Blake Steele, Powertech

Valois Shea, EPA

Douglas Minter, EPA

Starting at 9 am, EPA and Powertech discussed the following topics to provide EPA clarification on Powertech's comments:

1. **Pressure step rate test (SRT) procedures and location for determining the fracture gradient of the Inyan Kara.** Powertech described different approaches and locations for conducting SRTs. Options include one running one SRT in Section 33 or SRTs at different depths.
2. **Options for drilling into the Deadwood formation under the Class V permit.** We discussed if there are any benefits from drilling this deep and if there are other ways to characterize the base of the Minnelusa to ensure hydraulic confinement to protect the underlying Madison as a USDW.
3. **Reconsidering the current AE delineation boundaries:** If Powertech wishes to propose changes, EPA would consider any changes and then public notice by specifically requesting comment on these changes. This could be done after wellfield operations/injection commence as long as ISR can safely occur within the current delineated areas. Powertech will respond on how they wish to proceed.
4. **December 15, 2015, USFWS Letter to Powertech regarding need for an eagle "take" permit:** We discussed Powertech's baseline wildlife report and how Powertech would commence operations without the take permit in place (e.g., starting in the Burdock area further away from eagle habitat).
5. **Avian Management Plan:** This is a SD Game and Fish and DENR requirement and Powertech will submit this after it has obtained all federal permits and a State large scale mine permit. It will have to update its wildlife report before its submits this Plan to the State. A number of mitigation measures for protecting endangered species are already approved in the approved NRC license.
6. **Well 16:** Lisa spoke with DENR who confirmed that the classified use of the well could be changed by letter of request by Powertech (e.g., to a "monitoring/observation" well). However, PT would have to figure out if it would need to provide another source of stock water to the land owner under this new classification. EPA committed to provide feedback on this proposed approach.

We agreed to let PT know later when we would be ready to schedule our next call. Conference call concluded at 10:15 am.

Questions for Powertech Related to the Class V permit:

1. What is your timeframe for construction of the Class V wells and for construction of the Madison drinking water wells?
2. If you get the water rights permits from the DENR, why would you not construct the Madison water supply wells?
3. What is your backup water supply if you don't get the water rights permits from DENR?
4. We understand the challenges related to using the ammonium nitrate as the tracer in the drilling mud. Is there another tracer you could use in the drilling mud?
5. Is there a reason you would not do a drill stem test on the Minnelusa while drilling the well to confirm that it is not a USDW as early as possible?
6. Related to the requirement for collecting core in the confining zones: How would you decide where to collect core? Are you asking to remove the 50 ft minimum?
7. We want to explain the thinking behind the Limited Authorization to Inject process.
8. Discuss the flexibility you are looking for under comment 24 for permitted well construction requirements.
9. Discuss "appropriate methods" for obtaining uncontaminated DST samples as stated in comment 9 which proposes groundwater "sampling be conducted 'as appropriate given the tools available' "
10. Comment 33 refers to the stability criteria for field-measured pH, specific conductance and temperature described in the June 2011 TR RAI 5.7.8-19 Response which states "The criterion used to assess stability will be three consecutive measurements of each of the field parameters with values for each parameter within 10%." In the Environmental Report, Table 6.1-17: *Stability Criteria for Collecting Groundwater Samples at Pumped Wells* lists the criteria for these three parameters as shown below for collecting the groundwater samples used for the permit and license application water quality data.

Field Measurement	Stability Criteria ¹
pH	+/- 0.1 standard units
Temperature	+/- 0.2 C
Specific conductivity	+/- 5% (SC <= 100 µS/cm); otherwise +/- 3%

Why can't these stability criteria be used for the Class V well samples or at least for the Minnelusa samples? We are concerned that the Minnelusa will have elevated temperature and specific conductance and 10% difference will be elevated accordingly.

Robinson, Valois

Subject: Dewey-Burdock Call confirmed: Conference phone number: +1 (202) 991-0477;
Conference ID: Ex. 6 Personal Privacy (PP)

Location: R8DEN-7109-Coneflower/R8-Wynkoop

Start: Thu 5/3/2018 9:00 AM
End: Thu 5/3/2018 10:00 AM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Shea, Valois
Required Attendees: Tinsley, Chuck; Minter, Douglas; John Mays
Resources: R8DEN-7109-Coneflower/R8-Wynkoop

Conference phone number: +1 (202) 991-0477; Conference ID: Ex. 6 Personal Privacy (PP)

RECORD OF COMMUNICATION

May 3, 2018

Summary of Meeting (conference call) to discuss questions and answers related to the Class V wells area permit.

Lisa Scheinost, Powertech Licensing and Compliance Engineer

John Mays, Powertech COO

Valois Shea, EPA

Douglas Minter, EPA

Starting at 9 am, EPA and Powertech discussed the following topics to provide EPA clarification on Powertech's comments:

Questions for Powertech Related to the Class V permit:

1. What is your timeframe for construction of the Class V wells and for construction of the Madison drinking water wells? Class V disposal wells must be completed and operational before Class III sub/surface operations commence. The cost for a Madison well would be high (at least a million or more dollars per well). PT is planning to budget for at least one Madison well as a contingency knowing that it may be needed some time later before ISR operations are finished. In its comments, PT objected to this being requirement (i.e., the draft permit requires that two Madison wells be drilled). EPA will need to think about and talk further with PT about how confinement of the Lower Minnelusa can be determined to be adequate absent any data from drilling a Madison water well.

2. If you get the water rights permits from the DENR, why would you not construct the Madison water supply wells? The demand for Madison water is not significant until later in the project timeframe for groundwater restoration, etc. There are other sources of water including the Inyan Kara and other shallower aquifers where the chemistry may be more similar to the ISR mining zone than the Madison. PT can use RO if needed to facilitate restoration and the need for Madison may be a last option due to expense, etc.

3. What is your backup water supply if you don't get the water rights permits from DENR?

See above.

4. We understand the challenges related to using the ammonium nitrate as the tracer in the drilling mud. Is there another tracer you could use in the drilling mud? PT does believe that there are alternative tracers (e.g., fluorescent dye) available but would need to research this further to confirm what would work best.

5. Is there a reason you would not do a drill stem test on the Minnelusa while drilling the well to confirm that it is not a USDW as early as possible? PT would be willing to do this when drilling the Madison well but noted that this is not a requirement in the draft permit. PT would also expect to sample the Minnelusa injection well and could include a DST even though other local data shows that the aquifer should be above 10,000 mg/l TDS. PT was also planning to take a sample after the casing, tubing, and packer were installed for the Minnelusa injection well. PT stated that TDS samples of the Minnelusa surrounding the project area show concentrations above 10,000 mg/l.

RECORD OF COMMUNICATION

6. Related to the requirement for collecting core in the confining zones: How would you decide where to collect core? Are you asking to remove the 50 ft minimum?

In proposing their alternative, PT would take core samples during drilling of the Minnelusa injection well based on the log of a nearby well and then check for whether comparable confinement is found by comparing these samples against the results of subsequent logging of the injection well after it is drilled.

7. We want to explain the thinking behind the Limited Authorization to Inject process. Region 8 explained how this has been done for Class II wells. We explained that EPA will always need time to review testing/logging results after initial injection before it determines if longer-term injection can proceed. PT acknowledged this. We committed to coordinating closely on this with PT when the time comes. PT let us know that a DENR Mining Division inspector will maintain a field presence for monitoring ISR operations.

8. Discuss the flexibility you are looking for under comment 24 for permitted well construction requirements. EPA has the flexibility to adjust the well construction requirements during its initial drilling and construction by minor modification. Once the well is built and operational, subsequent changes to well construction are considered a major modification. PT would like to see more flexibility in the final permit conditions to accommodate a change in casing size, casing perforations within an interval that is already perforated, etc. PT stated the existing draft permit requires a major modification and would not allow them the flexibility they need.

9. Discuss "appropriate methods" for obtaining uncontaminated DST samples as stated in comment 9 which proposes groundwater "sampling be conducted 'as appropriate given the tools available' ". PT requests more flexibility with this requirement including since it may not be possible to use a submersible pump during a DST.

10. Comment 33 refers to the stability criteria for field-measured pH, specific conductance and temperature described in the June 2011 TR RAI 5.7.8-19 Response which states "The criterion used to assess stability will be three consecutive measurements of each of the field parameters with values for each parameter within 10%." In the Environmental Report, Table 6.1-17: *Stability Criteria for Collecting Groundwater Samples at Pumped Wells* lists the criteria for these three parameters as shown below for collecting the groundwater samples used for the permit and license application water quality data.

Field Measurement	Stability Criteria ¹
pH	+/- 0.1 standard units
Temperature	+/- 0.2 C
Specific conductivity	+/- 5% (SC <= 100 µS/cm); otherwise +/- 3%

Why can't these stability criteria be used for the Class V well samples or at least for the Minnelusa samples? We are concerned that the Minnelusa will have elevated temperature and specific conductance and 10% difference will be elevated accordingly.

Note: I was out of the room during this conversation with PT.

RECORD OF COMMUNICATION

For ESA, the eagle nest tree has fallen down in the Dewey unit and no eagles are residing in the project area this year. Couldn't they return? Yes, PT would take steps accordingly as species has coexisted in other ISR sites in Wyoming. We let PT know that Lynne Newton would be working on our ESA findings related to the DB project along with our attorneys.

Robinson, Valois

Subject: Dewey-Burdock Call
Location: R8DEN-5112-Onyx/R8-Wynkoop; call in number: 202 991 0477 meeting code Ex. 6 Personal Privacy (PP)
Start: Thu 9/13/2018 9:00 AM
End: Thu 9/13/2018 10:00 AM
Recurrence: (none)
Meeting Status: Meeting organizer
Organizer: Shea, Valois
Required Attendees: John Mays; Minter, Douglas; Tinsley, Chuck; Arnold, Rick
Resources: R8DEN-1111-Atrium@epa.gov; R8DEN-2117-Bison/R8-Wynkoop; R8DEN-2118-Bitterroot/R8-Wynkoop; R8DEN-2119-Columbine/R8-Wynkoop; R8DEN-2121-Dakota/R8-Wynkoop; R8DEN-2122-Juniper/R8-Wynkoop; R8DEN-2124-RockyMtn/R8-Wynkoop; R8DEN-2126-Sagebrush/R8-Wynkoop; R8DEN-2132-Tundra/R8-Wynkoop; R8DEN-2133-Wasatch/R8-Wynkoop; R8DEN-3142-Canyon/R8-Wynkoop; R8DEN-3208-Meadows@epa.gov; R8Den-4103-FireholeRiver/OIG-Wynkoop-Restricted; R8DEN-4153-YellowstoneRiver/R8-Wynkoop; R8DEN-4173-SnakeRiver/R8-Wynkoop; R8DEN-4259-PlatteRiver/R8-Wynkoop; R8DEN-5112-Onyx/R8-Wynkoop; R8DEN-5113-Granite/R8-Wynkoop; R8DEN-6107-GrayWolf/R8-Wynkoop; R8DEN-6108-Grizzly/R8-Wynkoop; R8DEN-6152-Teaming/R8-Wynkoop; R8DEN-8114-PikesPeak/R8-Wynkoop; R8DEN-8116-LaPlata/R8-Wynkoop; R8DEN-8134-Teaming/R8-Wynkoop; R8DEN-9127-CloudDancer/R8-Wynkoop; R8DEN-Library-2ndfloor/R8-Wynkoop; R8LAB-A131-ConferenceRoom/R8-Wynkoop; R8MT-Big-Sky-Room-301/MT-R8-HELENA; R8MT-Blackfoot-Room-330/MT-R8-HELENA; R8MT-Clark-Fork-Room-347/MT-R8-HELENA; R8MT-Headwaters-Room-329/MT-R8-HELENA; R8MT-John-Wardell-Room-361/MT-R8-HELENA
Categories: Business, Phone Call

call in number: 202 991 0477
meeting code Ex. 6 Personal Privacy (PP)

RECORD OF COMMUNICATION

September 13, 2018

Call with Powertech to discuss next steps with the draft permits.

John Mays, Powertech COO

Lisa Scheinost, Powertech

Douglas Minter, EPA

Chuck Tinsley, EPA

Rick Arnold, EPA

Valois Shea, EPA

Summary of Call: Call with Powertech to talk about next steps for the draft permits

The EPA let Powertech know we have decided to issue updated draft permits.

The Class III draft permit will no longer contain requirements for post-restoration modelling. The updated draft permit will require Powertech to develop a Conceptual Site Model that will involve collecting targeted, site-specific data in order to calibrate a geochemical model that will be required to evaluate the potential for ISR contaminants to cross the downgradient aquifer exemption boundary. Powertech will need to do a model for each wellfield demonstrating that the restored concentrations of ISR contaminants will be geochemically stable in the long term and evaluate the potential for ISR contaminants to cross the downgradient aquifer exemption boundary.

The Region 8 UIC Program has set up a work order on the EPA's contract with Cadmus to provide a criteria document listing important information to include in the Conceptual Site Model and the geochemical model that will assist the EPA in developing the Class III permit requirements for each type of model. Cadmus will also generate a technical support document for each type of model to assist the EPA in developing the explanation of the permit requirements to include in the Class III Fact Sheet. Cadmus will also develop a document listing acceptance criteria for the geochemical model, which will be included as an appendix to the Class III permit. This will assist the EPA staff person who reviews each wellfield model to be sure the model complies with permit requirements and is adequate for the intended purposes.

The geochemical model will be due to the EPA at the time of wellfield closure, except for Burdock wellfields 6, 7 and 8. The Class III draft permit will require Powertech to complete a geochemical model to include in the Injection Authorization Data Package Report. The EPA wants to understand the potential for ISR contaminants to cross the aquifer exemption boundary for these wellfields before issuing the authorization to inject in these wellfields.

Another occasion when the geochemical model would need to be done before well closure is when there is an expanding excursion plume. The geochemical model would be used to evaluate the potential extend of the excursion plume and the potential for ISR contaminants to cross the downgradient aquifer exemption boundary.

The Class V permit will be updated to address comments received from Powertech. The EPA has identified a number of changes that need to be made based on public comment and review of the permit by a new EPA permit writer.

RECORD OF COMMUNICATION

Chuck Tinsley and Rick Arnold were introduced to Powertech during this meeting. Chuck will be working on changes to the updated Class V draft permit and Rick will be working on the modeling requirements in the updated Class III permit.

Notes on Darcy's call with Azarga, Wednesday, November 7, 2018

Darcy told them:

We are moving ahead with the contract to develop the criteria for the modeling requirement

Az. said it doesn't make sense to develop specific modeling requirements right now because things will change and the requirements will be too prescriptive and out of date by the time they get to the point where they actually do the modeling.

Ex. 5 Deliberative Process (DP)

Az. is contemplating no change in the AE boundary at this time, however, they need to understand how it will affect the process if they need to expand the boundary location by 10 or 15 feet once they do the delineation drilling and better understand the extent of the ore deposits. The exact AE boundary would be a part of the wellfield data package report. Is a whole new public process required?

Ex. 5 Deliberative Process (DP)

Az. states that if they do not expand the AE boundary, they expect the timeframe to be shorter for public noticing the 2nd draft permit, i.e. sooner than May 1.

Az. wants to change the 1,600 foot buffer they proposed in the Class III Permit application to 1,000 feet from a wellfield injection or recovery well to the permit boundary. How will that impact things?

Az. clarified in their comments when they said 1,600 foot buffer between a wellfield and the project boundary, they didn't intend to include the perimeter monitoring well ring, only injection and recovery wells. That clarification has the effect of decreasing the buffer by 400 feet. Now they want to make the buffer 1,000 feet, further decreasing it by 600 feet: effectively a 1,000 foot decrease in the buffer.

Ex. 5 Deliberative Process (DP)

Az. wants us to share information about draft permit conditions by releasing information in the same way the NRC does, by posting the info on Adams website. Ideally they would like a look at the new permit conditions before we issue the public notice.

Ex. 5 Deliberative Process (DP)

Darcy asked about the status of the ASLB decision.

Az. says they issued a press release last week about the Board decision. The Board decision offers two options:

1. Recommence the survey with the 4 week timeline, two 2-week surveys in the field.
2. Hold an evidentiary hearing.

The NRC decides which options and the deadline for the decision is Nov 30.

Az. says the OST came in at the last minute with the new proposal that would take about a year to complete.

What will an evidentiary hearing provide?

Robinson, Valois

Subject: Call to Discuss Dewey-Burdock AE boundary and NRC public disclosure process
Location: Call John from Douglas's office

Start: Tue 11/13/2018 2:00 PM
End: Tue 11/13/2018 3:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Shea, Valois
Required Attendees: Minter, Douglas; John Mays

Hi John,

I got your voicemail message and have done some looking into the AE boundary issue and the NRC public disclosure process. It would be helpful to talk with you to get more clarification around those two topics. Does this time frame work for you? If not, please suggest a different time.

Douglas and I are also free from 3-4pm on Tuesday. Between the two of us, there is not another free hour until Friday, Nov 16. Friday is open except from 11:00 - 11:30 am.

Thanks!

RECORD OF COMMUNICATION

November 13, 2018

Summary of Call with Powertech to discuss options for the aquifer exemption boundary and how the EPA public review process differs from the NRC public review process

John Mays, Powertech COO

Lisa Scheinost, Powertech

Douglas Minter, EPA

Valois Shea, EPA

Summary of Call:

Powertech requested a call to discuss the steps to change the aquifer exemption boundary from the location originally requested.

The EPA's answer: Submit a new AE request with maps showing where the new AE boundary would be located. Powertech would need to do updated capture zone analysis for all the private wells located downgradient or cross-gradient near any wellfields, basically redo the EPA's capture zone analysis with a flow model that can simulate well pumping and well resting stages more realistically than the EPA's status pumping equation.

The first draft Aquifer Exemption Record of Decision set the AE boundary 120 feet from the perimeter monitoring well rings. The EPA realized that the perimeter monitoring well ring could shift slightly after wellfield delineation drilling identified more precisely the edges of the uranium ore deposits. We will issue an updated AE Record of Decision that makes clear to the public the fact that the AE boundary could shift after wellfield delineation. The Region 8 Office of Regional Council advised the UIC Program that the AE ROD would need to show the public just how far out the AE boundary could potentially move before the EPA would need to receive a new AE application.

EPA questions to Powertech: What is the maximum extent Powertech expects the AE boundary to move?

Powertech response: no more than ¼ mile from the present boundaries of the uranium ore deposits (what Powertech considers to be the wellfield boundaries), and most likely not nearly that far in most cases.

EPA reply: the new AE ROD will include a map that shows a boundary ¼ from the edge of the ore deposits with the aquifer exemption boundary map overlain to show the public the maximum extent the AE boundary could move before the EPA would require a new aquifer exemption application and new capture zone analysis for private wells.

Powertech had also asked the EPA if the agency could simulate the NRC public review process where information is released to the public as it is handled by the agency, rather than go through the 30-day public comment period.

The EPA's answer: The EPA public review process is regulated under 40 CFR part 124. We have to have issue draft permit decisions, schedule a 30 days comment period, provide a public hearing if the public requests one. With the level of public interest we will schedule the public hearing without waiting for a request from the public. There is no process for release documents for public review before the draft permit issuance.

Robinson, Valois

Subject: Dewey Burdock Call
Location: R8DEN-5112-Onyx/R8-Wynkoop (or Pyrite if available)

Start: Thu 2/7/2019 10:00 AM
End: Thu 2/7/2019 11:00 AM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Shea, Valois; John Mays; Blake Steele; Bahrman, Sarah; O'Connor, Darcy

John/Blake: we hope this time aligns with your respective time zones.

Call in: 202 991 0477 Code Ex. 6 Personal Privacy (PP)

Douglas

RECORD OF COMMUNICATION

February 7, 2019

Summary of Call with Powertech to discuss new time line for issuing the updated draft permits after the furlough added delay to our timeline.

John Mays, Powertech COO

Lisa Scheinost, Powertech

Darcy O'Connor

Sarah Bahrman, EPA

Douglas Minter, EPA

Valois Shea, EPA

Summary of Call:

Powertech requested a call with the EPA in order to receive an update on the EPA's timeline for issuing the updated draft permits after the delay caused by the government furlough. The original time frame the EPA had proposed was to issue draft permits the end of May 2019. Now the EPA anticipates issuing draft permits in late August 2019.

Powertech asked why a furlough lasting 6 weeks resulted in a delay of 3 months. EPA staff explained that when they anticipated issuing updated draft permits in May, it was two permit documents and two fact sheets the EPA expected to issue for public review. Since that time, the Office of Region Council informed the UIC Program that there is regulatory authority to include mitigation measures in UIC permits to comply with the Endangered Species Act and a National Historic Preservation Act. In order to include mitigation measures to comply with the ESA, EPA staff would need to complete a Biological Assessment and consultation with the US Fish & Wildlife Service. Although development of the Biological Assessment is underway, there is still more work to do. Another document that will be issued for public review is an updated Environmental Justice (EJ) Analysis. The EPA decided, based on comments received during the public comment periods, that the EJ document should be updated to:

- 1) Include historic information on Treaties affecting the Black Hills in order to support additional Tribal Consultation on Treaty Rights,
- 2) Include analysis of the Black Hills as a sacred site and how historic environmental impacts has affected the spiritual integrity of the Black Hills and the resulting impacts on the wellbeing of Tribes with historic interest in the Black Hills.

Robinson, Valois

Subject: Call to discuss well construction, etc.

Location: Douglas's Office; Conference phone number: (202) 991-0477 Conference ID: Ex. 8 Personal Privacy (PP)

Start: Thu 5/2/2019 2:30 PM

End: Thu 5/2/2019 3:30 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Robinson, Valois

Required Attendees: Tinsley, Chuck; John Mays; Minter, Douglas

Resources: R8DEN-1111-Atrium@epa.gov; R8DEN-2117-Bison/R8-Wynkoop; R8DEN-2118-Bitterroot/R8-Wynkoop; R8DEN-2119-Columbine/R8-Wynkoop; R8DEN-2121-Dakota/R8-Wynkoop; R8DEN-2124-RockyMtn/R8-Wynkoop; R8DEN-2126-Sagebrush/R8-Wynkoop; R8DEN-3142-Canyon/R8-Wynkoop; R8DEN-3208-Meadows@epa.gov; R8Den-4103-FireholeRiver/OIG-Wynkoop-Restricted; R8DEN-4153-YellowstoneRiver/R8-Wynkoop; R8DEN-4173-SnakeRiver/R8-Wynkoop; R8DEN-5112-Onyx/R8-Wynkoop; R8DEN-5116-Teaming/R8-Wynkoop; R8DEN-6107-GrayWolf/R8-Wynkoop; R8DEN-6108-Grizzly/R8-Wynkoop; R8DEN-6152-Teaming/R8-Wynkoop; R8DEN-7101-PrairieRose/R8-Wynkoop; R8DEN-7102-7102TeamingRoom/R8Wynkoop; R8DEN-7108-Lupine/R8-Wynkoop; R8DEN-7109-Coneflower/R8-Wynkoop; R8LAB-A131-ConferenceRoom/R8-Wynkoop; R8MT-Big-Sky-Room-301/MT-R8-HELENA; R8MT-Blackfoot-Room-330/MT-R8-HELENA; R8MT-Clark-Fork-Room-347/MT-R8-HELENA; R8MT-John-Wardell-Room-361/MT-R8-HELENA

RECORD OF COMMUNICATION

May 2, 2019

Summary of Call with Powertech to discuss Class III and Class V well construction diagrams

John Mays, Powertech COO

Chuck Tinsley, EPA

Douglas Minter, EPA

Valois Shea, EPA

Summary of Call:

Class III well diagram discussion:

1. What would the open hole completion diagram look like for a Class III well compared to the existing well diagram with the well screen?

Answer: Besides no well screen, no gravel pack, K packers or J collar.

2. When would you use the open hole completion on a Class III well?

Answer: When the injection interval sandstone is competent enough to stand open unsupported and the injectate flows the injection interval efficiently with a well screen.

We talked through the changes in the Class V well diagrams and the Well Casing and Cement Summary table. Chuck will do new well construction diagrams to show what the permit requirements will be.

Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Douglas' Office

Start: Mon 8/5/2019 11:00 AM
End: Mon 8/5/2019 11:30 AM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: John Mays; Robinson, Valois

Hi John: please call us at 303 312 6079. If you have others calling in, I can set up a conference call line.

Thanks,

Douglas

RECORD OF COMMUNICATION

August 5, 2019

Summary of Call with Powertech to discuss permit requirements for demonstration of financial responsibility and proposed mitigation measures for the Triangle Mine vertical shaft as a potential roost or hibernaculum for the Northern Long Eared Bat

John Mays, Powertech COO

Douglas Minter, EPA

Valois Shea, EPA

Summary of Call:

The UIC permits need to include requirements to demonstrate financial responsibility for the two proposed Class V wells and the first Class III wellfield to be constructed. Powertech needs to have demonstration of FR in place before issuance of final permits.

We need to include a mitigation measure for the vertical ventilation shaft at the Triangle Mine in NWNW Section 31. The proposed mitigation measures states:

Establish a ¼ mile buffer zone around the Triangle Mine vertical ventilation shaft located at NWNW Section 35, T6S, R1E as a potential hibernaculum for the Northern Long-Eared Bat, where no tree removal or construction activity takes place all year round.

RECORD OF COMMUNICATION

August 6, 2019

Summary of Call with Powertech to discuss permit requirements for demonstration of financial responsibility and proposed mitigation measures for the Triangle Mine vertical shaft as a potential roost or hibernaculum for the Northern Long Eared Bat

John Mays, Powertech COO

Valois Shea, EPA

Summary of Call:

Powertech proposed a different approach for mitigation measure for the Triangle vertical mine shaft: Powertech would set up a motion-activated camera to see if there are bats coming in and out of the mine shaft. If there are no bats, they will investigate the mine shaft to confirm no bats are present, then put a finer mesh over the opening to prevent bats from entering the mine shaft.

If there are bats, they will set up the ¼ mile buffer zone around the mine shaft. However, there is a road near the shaft that residents use, so there will still be traffic along the road. The road will probably be improved to use for ISR operations, so road construction will occur at some point. That will have to be scheduled around the optimum season for bats, if there are bats present.

Robinson, Valois

Subject: Overview of Draft Class III and V UIC Permits
Location: R8DEN-6108-Grizzly/R8-Wynkoop Conference Call 202 991 0477 Code Ex. 6 Personal Privacy (PP)
Start: Tue 9/3/2019 9:00 AM
End: Tue 9/3/2019 12:00 PM
Recurrence: (none)
Meeting Status: Accepted
Organizer: Minter, Douglas
Required Attendees: John Mays; Robinson, Valois; Tinsley, Chuck; Arnold, Rick; Bahrman, Sarah

Hi John: we are prepared to give you and your team an overview of changes, etc. to the Class III and V draft permits in response to Powertech's past comments. We expect that this will take no more than an hour. Alternatively, if you have questions, etc. prepared by the beginning of the call, we could use part or all of our time addressing those. Also, if there are questions on any of the supporting documentation (e.g., ESA), we could address those as well.

Let us know what would work best for you and hopefully the above informs who you plan to have on the call with you.

Thanks,

Douglas

Conference Call 202 991 0477 Code Ex. 6 Personal Privacy (PP)

September 3, 2019 EPA Call with Powertech (Dewey Burdock UIC Permit Applicant)

Call commenced at 9:10 am

EPA: Douglas Minter, Valois Robinson, Rick Arnold, and Chuck Tinsley

Powertech: John Mays and Lisa Sheinost

EPA discussed the Class V Draft Permit conditions including minor/major changes in the following areas (Chuck Tinsley):

- Financial Responsibility Requirements
- Injection Well Construction Requirements
- Injection Zone Testing Requirements
- Geologic Coring Requirements for Confining and Injection Zone Analyses
- Water Quality Sampling Requirements for USDW Determination
- Madison Water Supply Well Requirements
- Seismic Activity Related Requirements
- Plugging and Abandonment Requirements

EPA discussed the Class III Draft Permit conditions including minor/major changes in the following areas (Valois Robinson and Rick Arnold):

- Post Restoration Monitoring (incl. Conceptual Site and Geochemical Modeling) Requirements
- Wellfield-specific Closure Plan Requirements
- Geochemical Stability Phase Monitoring Requirements
- Authorization to Inject Data Package Requirements for Wellfields 6, 7, and 8
- Excursion Monitoring Requirements for Injection and Non-Injection Zone Requirements
- Operational Monitoring Requirements for Domestic Water Well Sampling
- Injection Well Construction Requirements
- Injection Zone Testing Requirements
- Data requirements for the Conceptual Site Model and geochemical models
- Calibration Requirements for the Geochemical Models

EPA discussed the Draft Record of Decision for the Proposed Aquifer Exemption including minor/major changes in the following areas (Valois Robinson):

- Clarification of Aquifer Exemption Area Boundary Delineation
- Clarification of Need for Additional Capture Zone Analyses
- Options for Addressing Domestic Well 16 within the Proposed Aquifer Exemption Area

EPA discussed some of the Supporting Documentation for the Draft Permits including minor/major changes in the following areas:

- NHPA Compliance Documentation (incl. mitigation measures in Draft Permits)
- ESA Compliance Documentation (incl. mitigation measures in Draft Permits)
- Cumulative Effects Analysis
- Environmental Justice Analysis

John thought it would take at least two more weeks to review all of the permit-related documentation and determine if Powertech would have more questions, etc. to help inform their understanding of changes to the draft permits, etc. Douglas let John and Lisa know that at least 19 parties have requested a 90 day extension to the public comment period. John stated that 45 days would likely be enough to review and comment by October 10th.

Call ended at 10:50 am.

Robinson, Valois

Subject: EPA/Powertech Call
Location: Call in 202 991 0477 Code Ex. 6 Personal Privacy (PP)
Start: Wed 10/16/2019 3:00 PM
End: Wed 10/16/2019 4:00 PM
Recurrence: (none)
Meeting Status: Accepted
Organizer: Minter, Douglas
Required Attendees: John Mays; Robinson, Valois
Optional Attendees: Arnold, Rick

Notes on October. 16, 2019 call with Powertech

John

Lisa

Douglas

Rick

Valois

John: At the end of the draft permit there is an Appendix B listed, but not included. Appendix B Cadmus criteria report on geochemical model. Spoke to Valois & said the acceptance checklist, one of the five documents within the single pdf which has several titles in it. The record never does say that specifically. The titles and content delineate the approach for how you would do the CSM and Geochem model. Criteria for development of site conceptual model, criteria for geochemical model, support document, checklist accompanies and discusses considerations in . Concern: no statement in the record of specifically what appendix b is and what the Without a statement that clearly says the relevance of the documents, Conceptual site model document. A number of references and statements directly to first draft permit to requirements that have been removed.

p. 15

appendix in draft permit showing how to

statements related to post-restoration groundwater monitoring

There is still post-restoration monitoring required in the updated permit, but not the scale

Reference to baseline parameters that don't match up with the 2019 permit referenced in the document. Specific requirements copied right out of the first draft permit. Reference to 40 cfr 192 document put together for the rule change related to sampling. Assumptions are flawed, because they indicate

Summary of changes. Doesn't state in the draft permit.

Douglas: the record is not as clear as it needs to be on what requirements are in the updated draft permit. Go back to SOB to explain what the requirements are.

Next Steps:

Review Section 15 of the Fact Sheet

What does the permit say about the Appendix B document? The permit doesn't say anything about appendix B

Review the Cadmus document entitled *Geochemical Model Acceptance Criteria Checklist for the Dewey-Burdock Project* to see what the references to the other Cadmus documents say.

The purpose of this checklist is to provide considerations for the evaluation and acceptance of a geochemical model with reactive transport for the Dewey-Burdock project site. This checklist

accompanies and reflects discussions and considerations in the *Draft Criteria for Development of a Geochemical Model of the Dewey Burdock Project* and the *Draft Geochemical Model Criteria Support Document for the Dewey-Burdock Project*. This checklist is based on a criteria checklist in Newman (2018), with additional content added to tailor the checklist to reflect the needs of the development of the Underground Injection Control (UIC) Class III permit for the Dewey-Burdock site.

John suggests doing a search on “2017” of the Cadmus docs to look at the references to the 2017 permit requirements.

Robinson, Valois

Subject: EPA/Powertech Call
Location: Douglas' Office / Call in 202 991 0477 Code Ex. 8 Personal Privacy (PP)
Start: Tue 12/3/2019 4:00 PM
End: Tue 12/3/2019 5:00 PM
Recurrence: (none)
Meeting Status: Accepted
Organizer: Minter, Douglas
Required Attendees: John Mays; Blake Steele; Robinson, Valois; Arnold, Rick

Notes on Call with Azarga, Dec 3, 2019

Lisa S

Blake S

John Mays

Rick Arnold

Douglas

Valois

The ASLB decision is going to come out Dec 16.

Blake: Purpose to fully understand link between Cadmus document and the Class III model.

More time to digest and understand. The requirements of the geochemical model go way beyond the geochemical model proposed by Powertech in their comments.

Douglas: After last call we went back and reviewed the FS & Cadmus doc.

Intent of CSM to characterize site with hydrology, geology geochemistry to provide basis for model

Ion charge balance not more than 10% off. QA blanks and replicate samples

What are the ISR contaminants?

What are the quarterly reports going to be like?

Is there an approval process for the CSM?

Robinson, Valois

Subject: Powertech EPA Conference Call

Location: Pyrite

Start: Mon 1/13/2020 4:00 PM

End: Mon 1/13/2020 5:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas

Required Attendees: Blake Steele; John Mays; O'Connor, Darcy; Robinson, Valois; Arnold, Rick; Lucero, Adele

Call in number 202 991 0477 Code Ex: 9 Personal Privacy (PP)

Notes on Jan 13 call with Azarga

Blake, Lisa and John

Darcy, Rick, Douglas, Valois

Darcy talked about next steps:

When will the final permit go out? Do not have date yet. Here is what we are working on:

Public comments, making decisions on whether/how we will modify the documents, written response to comments, John had asked about contractor support with RtC & we do have support, finalize plan for compliance with NHPA & document it, finish tribal consultation & complete documents back to tribes on how we dealt with their comments/concerns.

Blake – can we finalize by end of Feb? Darcy – No; John forwarded ASLB decision, decided in our favor. So that is wrapped up. Would we sign on to the NRC PA. Darcy – too early to have that conversation. Darcy will meet with us to see if we can have a better idea of when final permits will be issued.

John - Final at this stage unless appealed to the to the Commission. Then the Commission would decide to accept it for review. They might not decide to take it. The license is not burdened at all. The commission gave a lot of guidance to the ASLB & indicated they were not favorable to the opposition's position. So chances are the Commission will probably not take it on. Every decision, the tone is strong in Azarga's favor. Extension given for opposition for file for a new action. The license is final unless an appeal is accepted by the Commission.

John: Key pieces to response:

Recent EPA decision on part 192 rulemaking. EPA said all proposed requirement updates. Strong statements that changed the landscape that things are fine the way they are 3 reasons for rescind the proposed rule

Concern that EPA did not have the legal authority to make have these requirements

The NRC process is already adequate for dealing with contaminants travel in the GW is the responsibility of the NRC. (review decision to see if it says that). Az would like to have all these permit requirements to be left up to the NRC, including geochemical modeling was removed. Criterion 5B5 standards for GW restoration, protective of what is outside of the AE boundary.

Lots of non-specific requirements that need to be addressed, first request to have EPA consider removing the GW model in its entirety. Duplicative of what NRC is requiring. Extra costs, etc.

A Plan B is included in their comments if we want to keep the GW model requirement. Our requirements are too open-ended, too much ambiguity. If the GW is restored to background, then they have done a lot of work for no reason. Does not analyze where human health will be endangered, but monitor and model for anything, Analytes not specified, usually ISR analytes are Radium & uranium.

Some ISRs have restored everything back to baseline. ACLs not taken into account – need to do all the work for that up front rather than at the end when you know you have an ACL.

Blakes add: key overall theme is fair an equitable treatment compared to other ISR projects in the US. EPA needs to justify why we have these extra requirements when ISR projects have been successful and protective for decades. Although the previous comments suggested a GW model but the EPA requirements goes way beyond the proposed model in the comments.

John: No one else is subject to these requirements. Not required by NRC or other U mines in Region 8. They want similar treatment as other operations.

Robinson, Valois

Subject: Call with Powertech
Location: Call-in number:+1 (720) 642-6536; Conference ID: 55767220; R8DEN-5116-Teaming/R8-Wynkoop

Start: Thu 2/27/2020 4:00 PM
End: Thu 2/27/2020 5:00 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Robinson, Valois
Required Attendees: Minter, Douglas; Arnold, Rick; Sierra-Lopez, Omar; John Mays; Blake Steele
Resources: R8DEN-5116-Teaming/R8-Wynkoop

Call-in number:+1 (720) 642-6536; Conference ID: Ex. 6 Personal Privacy (PP)

What is the basis for requiring additional requirements above and beyond the requirements in the NRC license and state permits? Explain that in RtC

EPA managers will ask: Given what you know about this particular site, what is different and what is the same compared to state regulated sites that would justify the additional requirements.

John wants to be sure that we are aware of the comments that the NRC requirements are designed to take care of contaminants crossing the AE boundary. Our requirements are very unique and Azarga wants the same requirements as other ISR sites. Explain in RtC why our requirements have different intent from NRC requirements.

AE boundary ¼ mile from currently defined ore zone. Building in a safety factor reducing opportunity that once all drilling is done, we don't have.

ESA mitigation measures

You have to stay away even if an animal is present, then immediate shutdown.

Annual wildlife surveys, wouldn't have to avoid the area after they had been cleared by a biologist doing the survey. They still need access to the wellfield even if an animal shows up. Recommendations on what is protective, if you can't do that. Have a biologist observing the species. Has acclimated these eagles. Strategies to deal with wildlife other than avoidance. Gwynn has accomplished this at coal mines. Try minimize impacts, can't avoid if they appear. Migratory species – no incentive for them to come to the location. Deterrents to prevent them from wanting to come to the ponds.

Step one: conduct survey to determine if the animals are present

Step two: mitigation measures if the animals are identified to already be there.

Need inherent flexibility, some time in the future before other wellfields will up constructed.

We need to spell out mitigation that will be used. Other best management practices are allowed, say what mitigation measures will be employed if an animal shows up. List procedures if an animal shows up.

A Biologist will conduct a survey. Then mitigation measures will be conducted depending on the situation.

Observation: Powertech is responsible for the observation. Then a biolo

Robinson, Valois

Subject: Discussion on borehole data request and method for determining AE boundary
Location: Skype Meeting: +1 (720) 642-6536, (Dial-in Number) Conference ID: Ex. 6 Personal Privacy (PP)
Start: Tue 4/14/2020 4:00 PM
End: Tue 4/14/2020 5:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Organizer: Robinson, Valois
Required Attendees: Blake Steele; John Mays; Lisa Scheinost; Minter, Douglas; Cheung, Wendy

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Toll number: +1 (720) 642-6536, Ex. 6 Personal Privacy (PP) (Dial-in Number) English (United States)

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Conference ID: 55767220

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Robinson, Valois

Subject: Call to discuss ESA measures in Dewey-Burdock draft permits
Location: Skype Meeting

Start: Fri 5/29/2020 4:15 PM
End: Fri 5/29/2020 5:15 PM

Recurrence: (none)

Meeting Status: Meeting organizer

Organizer: Robinson, Valois
Required Attendees: Blake Steele; Lisa Scheinost; John Mays; Minter, Douglas; Sierra-Lopez, Omar

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Conference ID: Ex. 6 Personal Privacy (PP)

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Robinson, Valois

Subject: EPA/Powertech Call
Location: Microsoft Teams Meeting

Start: Thu 7/2/2020 4:15 PM
End: Thu 7/2/2020 4:45 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays; Robinson, Valois

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Robinson, Valois

Subject: Dewey Burdock: UIC Permits
Location: Microsoft Teams Meeting

Start: Mon 8/17/2020 4:30 PM
End: Mon 8/17/2020 5:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Minter, Douglas
Required Attendees: O'Connor, Darcy; Blake Steele; John Mays
Optional Attendees: Arnold, Rick; Robinson, Valois

OnlineMeetingConfLink: conf:sip:Minter.Douglas@epa.gov;gruu;opaque=app:conf:focus:id:teams:2:0!
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Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Microsoft Teams Meeting

Start: Tue 9/8/2020 8:30 AM
End: Tue 9/8/2020 9:00 AM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays; Robinson, Valois

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SchedulingServiceMeetingOptionsUrl: https://teams.microsoft.com/meetingOptions/?organizerId=05688502-587f-4e52-bc27-43eb38d4d8f3&tenantId=88b378b3-6748-4867-acf9-76aacbeca6a7&threadId=19_meeting_YjkyNjVmZjQtNjJmMi00YTc0LTliNTktZThhZmRjMjEwNzY1@thread.v2&messageId=0&language=en-US

SchedulingServiceUpdateUrl: https://scheduler.teams.microsoft.com/teams/88b378b3-6748-4867-acf9-76aacbeca6a7/05688502-587f-4e52-bc27-43eb38d4d8f3/19_meeting_YjkyNjVmZjQtNjJmMi00YTc0LTliNTktZThhZmRjMjEwNzY1@thread.v2/0

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Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Microsoft Teams Meeting

Start: Tue 9/22/2020 4:30 PM
End: Tue 9/22/2020 5:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays; O'Connor, Darcy; Robinson, Valois

OnlineMeetingConfLink: conf:sip:Minter.Douglas@epa.gov;gruu;opaque=app:conf:focus:id:teams:2:0!
19:meeting_NzNmMjNIZWYtYzNhYy00ODg2LTliYTktNTdmNGMxMTc2MGMz-thread.v2!
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https://teams.microsoft.com/meetingOptions/?organizerId=05688502-587f-4e52-bc27-43eb38d4d8f3&tenantId=88b378b3-6748-4867-acf9-76aacbeca6a7&threadId=19_meeting_NzNmMjNIZWYtYzNhYy00ODg2LTliYTktNTdmNGMxMTc2MGMz@thread.v2&messageId=0&language=en-US

SchedulingServiceUpdateUrl:
https://scheduler.teams.microsoft.com/teams/88b378b3-6748-4867-acf9-76aacbeca6a7/05688502-587f-4e52-bc27-43eb38d4d8f3/19_meeting_NzNmMjNIZWYtYzNhYy00ODg2LTliYTktNTdmNGMxMTc2MGMz@thread.v2/0

SkypeTeamsMeetingUrl: https://teams.microsoft.com/l/meetup-join/19%3ameeting_NzNmMjNIZWYtYzNhYy00ODg2LTliYTktNTdmNGMxMTc2MGMz%40thread.v2/0?context=%7b%22tid%22%3a%2288b378b3-6748-4867-acf9-76aacbeca6a7%22%2c%22oid%22%3a%2205688502-587f-4e52-bc27-43eb38d4d8f3%22%7d

SkypeTeamsProperties: {"cid":"19:meeting_NzNmMjNIZWYtYzNhYy00ODg2LTliYTktNTdmNGMxMTc2MGMz@thread.v2","private":true,"type":0,"mid":0,"rid":0,"uid":null}

John and Blake: we may be a few minutes late getting on the call.

Thanks,

Douglas

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Sept 22, 2020 Meeting with Azarga

Present on the call
Blake Steel, Azarga
John Mays, Azarga
Douglas
Darcy
Valois

Azarga would like update on status of permits and EPA's schedule.
EPA provided update will on reasons for delay, consultation with OST, work still to be done.

Topics for discussion:
NRC leadership discussions
Working on RTC
OST consultation

NRC leadership interaction completed. EPA/NRC meeting at higher management level. Clarified regulatory roles of each agency and NRC raised additional questions about EPA's process. Douglas M working with their staff have better understanding of respective roles and how to move forward with EPA addressing SDWA requirements while avoiding conflicting requirements and unnecessary duplication.

We will continue to work with NRC Environmental Branch discussing the PA.

Where are we with RTC: biggest lift. Hundreds of pages of comments, some very technical. We are continuing to work toward finalizing that document getting it ready for management review.

Tribal consultation: Darcy- we had a meeting with tribal council on Aug 28. We had an in-person consultation scheduled in Pine Ridge but could not travel due to COVID. EPA received letter from Tribe requesting joint consultation with BLM. The Tribe was pretty clear that they would not hold a meeting until tribe heard from BLM. Another meeting is planned for Oct 2. EPA sent a letter to the Tribe replying to letter about consultation with BLM.

Blake - What are the tech meetings with the Tribe about? EPA: We think reviewing Tribe's comments submitted during public comment period.

We plan to respond back to each tribe with a document stating how we took their comments into account and if we didn't why. This may be the RTC.

Blake: What is the new permit issuance date?

DM: We will know more after our meeting with the Tribe on Oct 2 and after our meeting Friday.

Darcy: we will keep you posted if anything should change. We have made it a clear to the Tribe about our deadline for issuing the permits.

Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Microsoft Teams Meeting

Start: Fri 10/9/2020 4:30 PM
End: Fri 10/9/2020 5:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays; Robinson, Valois

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Oct 9, 2020 call with Powertech

Present on call are

Azarge:

Blake

John

EPA:

Douglas

Valois

Notes:

Brief update on where we are:

Tribal Consultation: winding the process down.

Talked with RA who directed us to bring process to closure this month.

We are waiting on further communication with Tribal Governments before we commit to that deadline for tribal consultation closure.

Important for EPA to bring consultation to closure according to our Consultation Policy and document that.

Azargs: Were we able to hold meeting on Oct 2? EPA: We continue to be in communication with OST and be available for meeting. We want to be clear about the timing factor with them.

Final permit development and issuance

Last time we talked, Darcy was on the call, but she is not able to join this call. She is aware of PT's request for timing update.

Goal is to get final permits out by end of month.

Lot's of moving parts, RTC biggest lift. Needs to be consistent with all supporting documentation. We are commencing process of management review next week. We are keeping NRC and DENR informed along with Tribal Partners.

Blake: can we be 99% sure we will get this wrapped up this month? Getting lots of calls from sharholders concerned about upcoming election.

Douglas: there are no guarantees. The closer we get toward the end of this month the more certain we can be. The RA will be asking hard questions about timing. We have told him we will be done by end of Oct. This will not be our last conversation with you all. We will be reaching out to you by the end of this month to give you a more certain date later this month. We afford this courtesy to all permittees. We aren't able to be more certain than that.

Arga: The NRC commission denied review of the ASLB decision. Didn't find the arguments made by the Tribe warranted review. Spoke about the amount of time has been unreasonable. NEPA process now limited to two years. Unequivocal that the information is unavailable. Final agency decision from NRC. Yesterday.

Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Microsoft Teams Meeting

Start: Thu 10/22/2020 8:30 AM
End: Thu 10/22/2020 9:00 AM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays; Robinson, Valois

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Azarga Meeting
October 22, 2020
Present on call:
John Mays
Blake Steele
Douglas Minter
Valois Robinson

Update Powertech's address to the Edgemont Office.

EPA goal is to issue final permits by the end of the month, but not sure we will be done by the end of the month.

Need to have complete AR that attorneys have approved.

Addressing all comments since 2017.

Review of response to comments is intensive.

We will probably issue a press release.

We will check in with Azarga next week on Thursday about whether we will make the end of the month deadline.

Darcy will sign the permits and AE ROD. This is a level above our typical permit/AE sign-off.

Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Microsoft Teams Meeting

Start: Thu 10/29/2020 4:00 PM
End: Thu 10/29/2020 4:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays; Robinson, Valois; O'Connor, Darcy

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Azarga Meeting
October 29, 2020

Present on call:

John Mays

Blake Steele

Darcy O'Connor

Douglas Minter

Valois Robinson

EPA gave Powertech an update on the status of issuing final permits. We are still working on the RTC and will not be ready by the end of the month. We will reassess and get back to them in early November.

Minter, Douglas

To: Minter, Douglas

Subject: Record of Communication with Powertech UIC Dewey Burdock Permits

On 11/10/20, EPA's Douglas Minter spoke to Powertech's Blake Steele and John Mays about the status of EPA's final permit decisions and expectations on the timing of these decisions.

Douglas Minter

Robinson, Valois

Subject: Dewey Burdock UIC Permits
Location: Microsoft Teams Meeting

Start: Wed 11/18/2020 4:00 PM
End: Wed 11/18/2020 4:30 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Minter, Douglas
Required Attendees: Blake Steele; John Mays
Optional Attendees: Robinson, Valois

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From: Minter, Douglas
To: Minter, Douglas
Subject: Record of Communication UIC Dewey Burdock Permits
Date: Wednesday, November 18, 2020 4:16:50 PM

On November 18, 2020, EPA's Douglas Minter spoke with Powertech's Blake Steele and John Mays to briefly discuss the status of EPA's final UIC permit decisions.

Douglas Minter